

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/974,963	MITRA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	F. Lin Khoo	2664	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/14/2005.
2. ☒ The allowed claim(s) is/are 1,3,5,6,8,10,11,13,15,16,18 and 20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                  |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>20051003</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                         |
|   | 9. <input type="checkbox"/> Other _____.   |

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with attorney William Wilbar (Reg No. 43265) on 29 September 2005.

The application has been amended as follows:

2. Claims 21, 22 and 24 have been cancelled.

### **REASONS FOR ALLOWANCE**

3. Claims 1, 3, 5, 6, 8, 10, 11, 13, 15, 16, 18, 20 are allowed.
4. The following is an examiner's statement of reasons for allowance: the prior art made of record does not teach in combination a method of queuing each packet for transmission using an assigned first and dynamically assigned second value, wherein

Art Unit: 2664

the first value is a sequence number  $S$  having a value of  $S = (W + (T * D) \gg \text{scale}) \% N$  wherein  $W$  is the sequence number of the last packet transmitted,  $T$  is a service factor,  $D$  is the size of each packet,  $\text{scale}$  is a divisor for  $(T*D)$  factor such that  $S$  does not wrap around too quickly,  $N$  is the range of sequence numbers and the second value is a real sequence number  $RS$  having a value of  $RS = (S + N)$  if  $(S < W)$ ; else  $RS = S$ .

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,092,115 to Choudhury et al. relates generally to a communications network implementing the TCP protocol, and to per-connection queuing and buffer management schemes for feedback-controlled network traffic.

U.S. Patent No. 6,061,330 to Johansson relates to an explicit rate mechanism that combines both information about the buffer occupancy and the input rate offered to a switch, and which can be used in a switch using an "ordinary" FIFO scheme as well as in a fair queuing scheduler.

Art Unit: 2664


U.S. Publication No. 2002/0176358 to Assa et al. relates to the general field of traffic management systems for communication networks wherein at least one of the queues having an agreed bandwidth requirement and at least one of the queues having no agreed bandwidth requirement.

U.S. Publication No. 2004/0213257 to Abdelilah et al. relates to redistribution of excess bandwidth in networks for optimized performance of voice and data sessions

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to F. Lin Khoo whose telephone number is 571-272-5508. The examiner can normally be reached on flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



WELLINGTON CHIN  
ADVISORY PATENT EXAMINER